

FIG. 1

START

S1 RECEIVE BROADCAST NOTIFICATION INFORMATION

S2 DETERMINE WHETHER NOTICE DISPLAY IS

5 NECESSARY/UNNECESSARY

S3 DISPLAY BROADCAST PROGRAM SELECTION SCREEN

S4 ACQUIRE BROADCAST PROGRAM INFORMATION

S5 RECEIVE BROADCAST DATA

S6 BROADCAST DATA RECEIVE PROCESSING

10 S7 SET BROADCAST DATA ALREADY READ FLAG

S8 SAVE NOTIFICATION UNNECESSARY INFORMATION

S9 END RECEPTION OF BROADCAST

END

15 FIG. 2

BROADCAST DATA COMMUNICATION SYSTEM

BROADCAST DATA TRANSMISSION SERVER 10

INTERNET 60

CORE NETWORK 20

20 BROADCAST DATA PROVIDING SERVER 51

BROADCAST DATA RECEIVING TERMINAL 41

FIG. 3

COMMUNICATION SECTION 400

25 BROADCAST NOTIFICATION INFORMATION RECEIVING SECTION 401

BROADCAST PROGRAM INFORMATION ACQUISITION SECTION 402

BROADCAST DATA RECEIVING SECTION 403

BROADCAST DATA PROCESSING SECTION 410

NEWS DISPLAY OUTPUT DETERMINATION SECTION 411

BROADCAST DATA RECEIVING DETERMINATION SECTION 412

BROADCAST END PROCESSING SECTION 413

5 INPUT/OUTPUT PROCESSING SECTION 430

BROADCAST DATA SAVING SECTION 420

INFORMATION OUTPUT SECTION 440

OPERATION INPUT SECTION 450

DISPLAY 441

10 SPEAKER 442

VIBRATOR 443

INPUT KEY 451

INPUT BUTTON 452

AUDIO INPUT SECTION 453

15

FIG. 4

BROADCAST NOTIFICATION INFORMATION D1(a)

D2: BROADCAST NOTIFICATION INFORMATION IDENTIFIER

BASEBALL

20 BROADCAST NOTIFICATION INFORMATION D1(b)

BASEBALL

BROADCAST NOTIFICATION INFORMATION D1(c)

SOCCER

25 FIG. 5

BROADCAST PROGRAM INFORMATION

SOCCER

WORLD CUP HIGHLIGHTS

FIG. 6

INFORMATION SERVICE

5 CURRENTLY ON AIR!
BASEBALL

FIG. 7

INFORMATION SERVICE

10 ON AIR!
SOCCER
BASEBALL

FIG. 8

15 BROADCAST DATA TRANSMISSION SERVER 10
BROADCAST DATA ACQUISITION SECTION 101
BROADCAST DATA SAVING SECTION 102
IDENTIFIER ADDITION SECTION 103
BROADCAST NOTIFICATION INFORMATION TRANSMISSION SECTION
20 104
BROADCAST PROGRAM INFORMATION REQUEST RECEIVING SECTION
105
ANALYSIS SECTION 106
BROADCAST PROGRAM INFORMATION TRANSMISSION SECTION 107
25 BROADCAST DATA TRANSMISSION SECTION 108

FIG. 9

BROADCAST DATA RECEIVING TERMINALS 41 TO 43
BROADCAST DATA TRANSMISSION SERVER 10
BROADCAST NOTIFICATION INFORMATION D1(a)
BROADCAST NOTIFICATION INFORMATION D1(b)
5 BROADCAST NOTIFICATION INFORMATION D1(c)
NEW PROGRAM DETECTION
RECEIVABLE NOTIFICATION INFORMATION (BROADCAST PROGRAM
INFORMATION REQUEST)
BROADCAST PROGRAM INFORMATION
10 BROADCAST DATA

FIG. 10

BROADCAST DATA TRANSMISSION SERVER 10
BROADCAST DATA ACQUISITION SECTION 101
15 SERVICE IDENTIFIER ADDITION SECTION 109
BROADCAST NOTIFICATION INFORMATION TRANSMISSION SECTION
104
BROADCAST DATA SAVING SECTION 102
ANALYSIS SECTION 106
20 BROADCAST PROGRAM INFORMATION REQUEST RECEIVING SECTION
105
TRANSMISSION PROGRAM INFORMATION TRANSMISSION SECTION
107
BROADCAST DATA TRANSMISSION SECTION 108

25

FIG. 11

BROADCAST NOTIFICATION INFORMATION D1(d)

SPORTS LIVE

BASEBALL

SOCCER

TENNIS

5 SKATING

BROADCAST NOTIFICATION INFORMATION D1(e)

SPORTS LIVE

BASEBALL

SOCCER

10 TENNIS

SKATING

BROADCAST NOTIFICATION INFORMATION D1(f)

SPORTS LIVE

BASEBALL

15 SOCCER NEW PROGRAM

TENNIS

SKATING

FIG. 12

20 INFORMATION SERVICE

SPORTS LIVE

BASEBALL

SOCCER

TENNIS

25 SKATING

FIG. 13

INFORMATION SERVICE

SPORTS LIVE

BASEBALL

SOCCER (UPDATED)

5 TENNIS

SKATING

FIG. 14

BROADCAST DATA RECEIVING TERMINALS 41 TO 43

10 BROADCAST DATA TRANSMISSION SERVER 10

BROADCAST NOTIFICATION INFORMATION D1(d)

BROADCAST NOTIFICATION INFORMATION D1(e)

BROADCAST NOTIFICATION INFORMATION D1(f)

NEW PROGRAM DETECTION

15 RECEIVABLE NOTIFICATION INFORMATION (BROADCAST PROGRAM
INFORMATION REQUEST)

BROADCAST PROGRAM INFORMATION

BROADCAST DATA

20 FIG. 15

START

S10 RECEIVE BROADCAST NOTIFICATION INFORMATION

S11 DETERMINE RECEPTION OF BROADCAST DATA

S12 ACQUIRE BROADCAST PROGRAM INFORMATION

25 S13 DISPLAY BROADCAST PROGRAM SELECTION SCREEN

S14 RECEIVE BROADCAST DATA

S15 BROADCAST DATA RECEIVE PROCESSING

S16 SET BROADCAST DATA ALREADY READ FLAG
S17 SAVE NOTIFICATION UNNECESSARY INFORMATION
S18 END RECEPTION OF BROADCAST
END

5

FIG. 16

BROADCAST DATA RECEIVING TERMINALS 41 TO 43
BROADCAST DATA TRANSMISSION SERVER 10
BROADCAST NOTIFICATION INFORMATION D1(X)
10 BROADCAST NOTIFICATION INFORMATION D1(Y)
BROADCAST NOTIFICATION INFORMATION D1(Z)
NEW PROGRAM DETECTION
RECEIVABLE NOTIFICATION INFORMATION (BROADCAST PROGRAM
INFORMATION REQUEST)
15 BROADCAST PROGRAM INFORMATION
BROADCAST DATA

FIG. 17

BROADCAST NOTIFICATION INFORMATION D1(X)
20 BROADCAST NOTIFICATION INFORMATION D1(Y)
BROADCAST NOTIFICATION INFORMATION D1(Z)

FIG. 18

BROADCAST PROGRAM INFORMATION
25 SOCCER
SPORT ON AIR

FIG. 19

INFORMATION SERVICE

SPORT ON AIR

BASEBALL

5

FIG. 20

INFORMATION SERVICE

SPORT ON AIR

SOCCER

10 BASEBALL (ALREADY VIEWED)

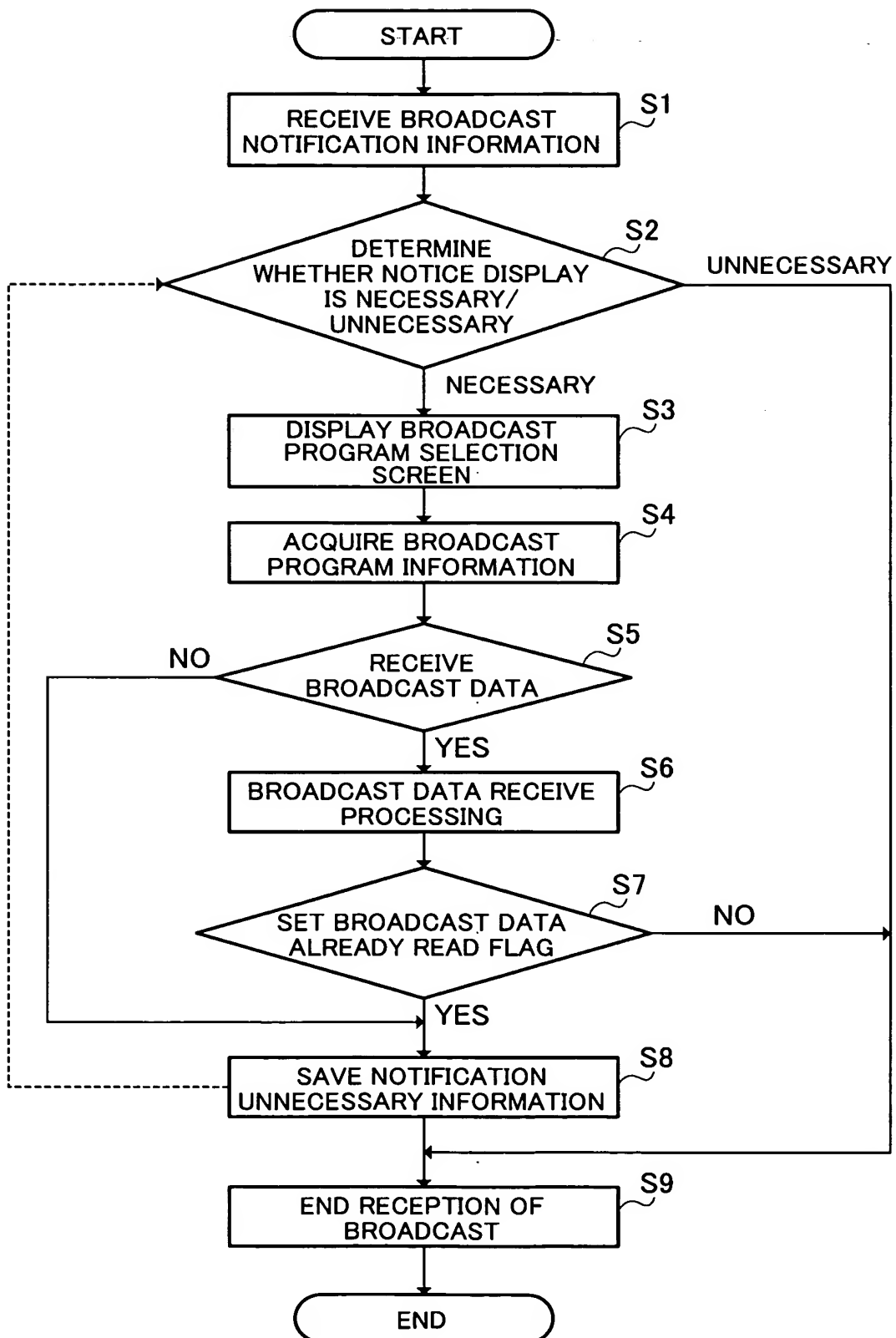


FIG.1

1: BROADCAST DATA COMMUNICATION SYSTEM

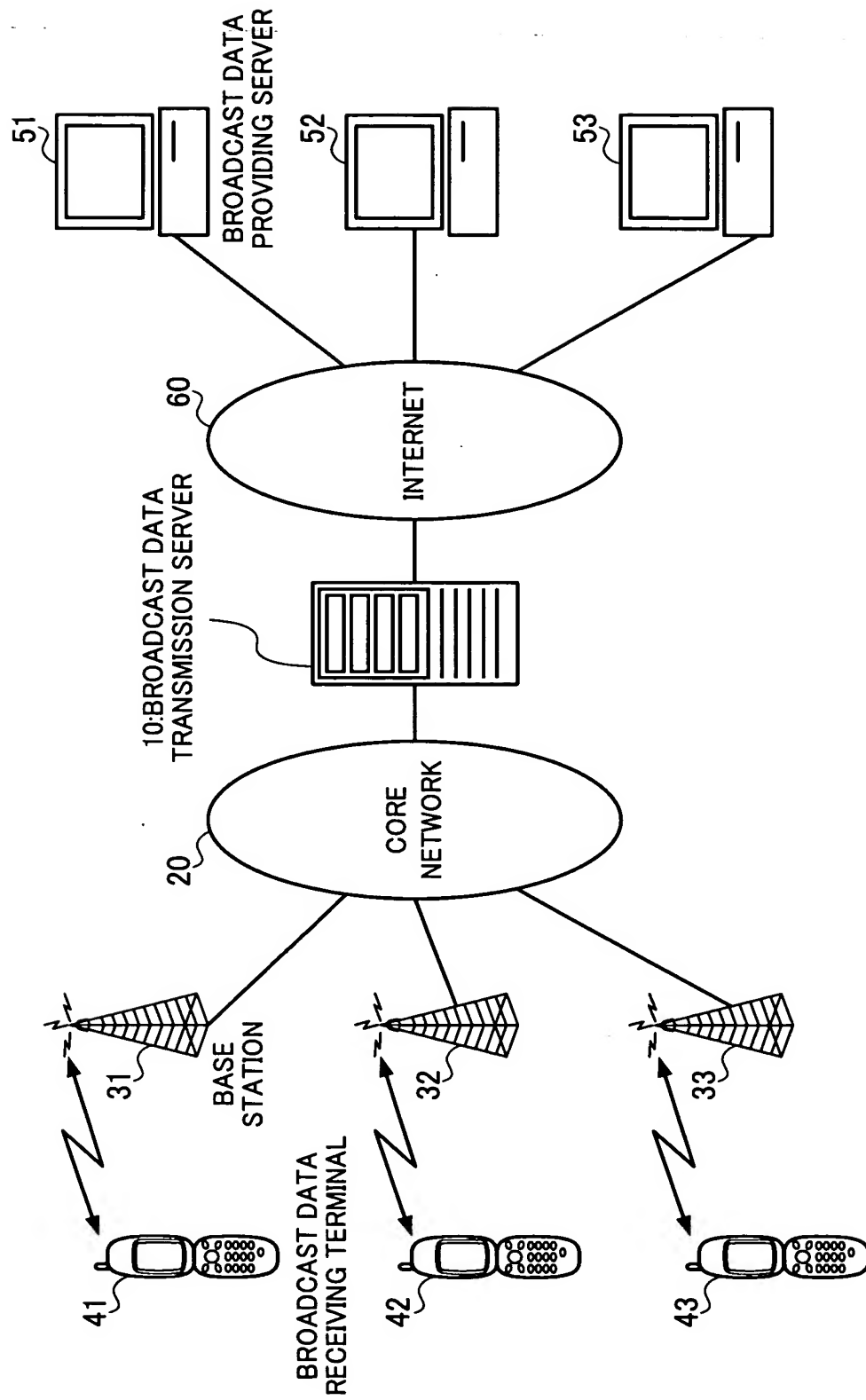


FIG.2

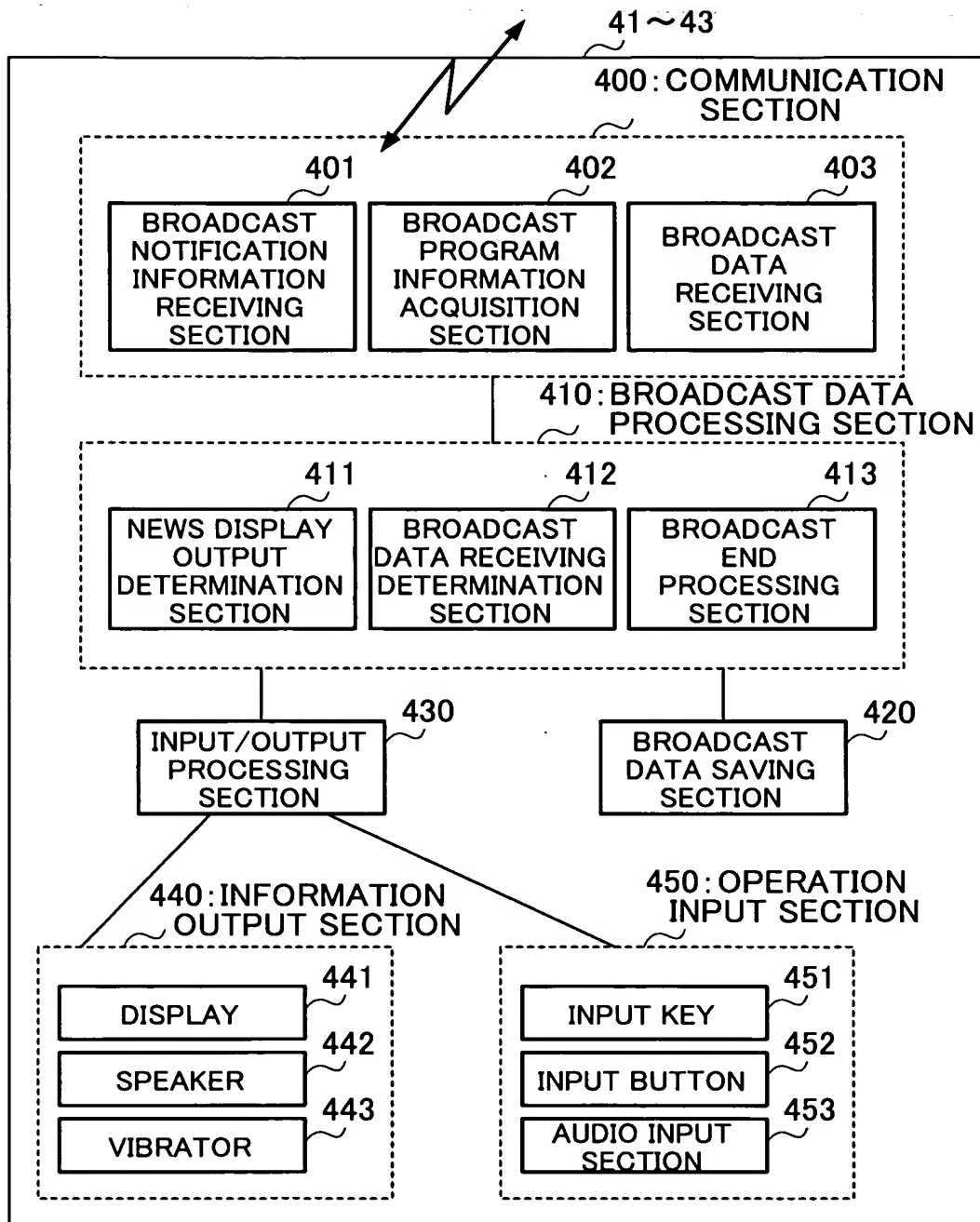


FIG.3

BROADCAST NOTIFICATION
INFORMATION D1(a)

D2: BROADCAST NOTIFICATION
INFORMATION IDENTIFIER

d1

d2

d3

BROADCAST NOTIFICATION
INFORMATION D1(b)

BROADCAST NOTIFICATION
INFORMATION D1(c)

FIG.4

BROADCAST PROGRAM INFORMATION 00001115.sdp

```
v=0
o=anonymous 2890844526 2890842807 IN IP4 192.168.10.10
s=SOCCER
i=WORLD CUP HIGHLIGHTS
e=anonymous@mail.com
c=IN IP4 0.0.0.0
b=AS:128
t=0 0
m=Video 0 RTP/AVP 96
b=AS:128
a=rtpmap:96 H263-2000/90000
a=fmtp:96 profile=3;level=1
m=audio 0 RTP/AVP 97
a=rtpmap:97 AMR/8000
a=fmtp:97
b=AS:13
```

FIG.5

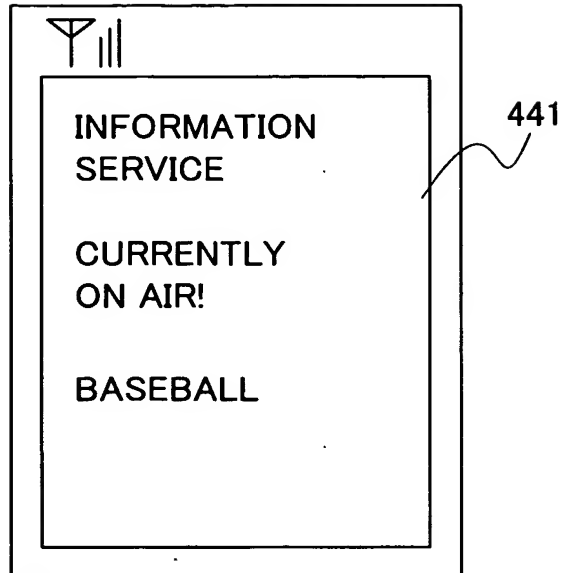


FIG.6

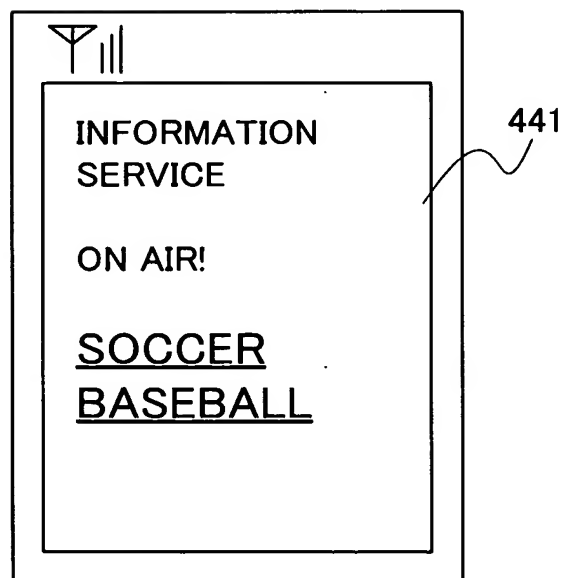


FIG.7

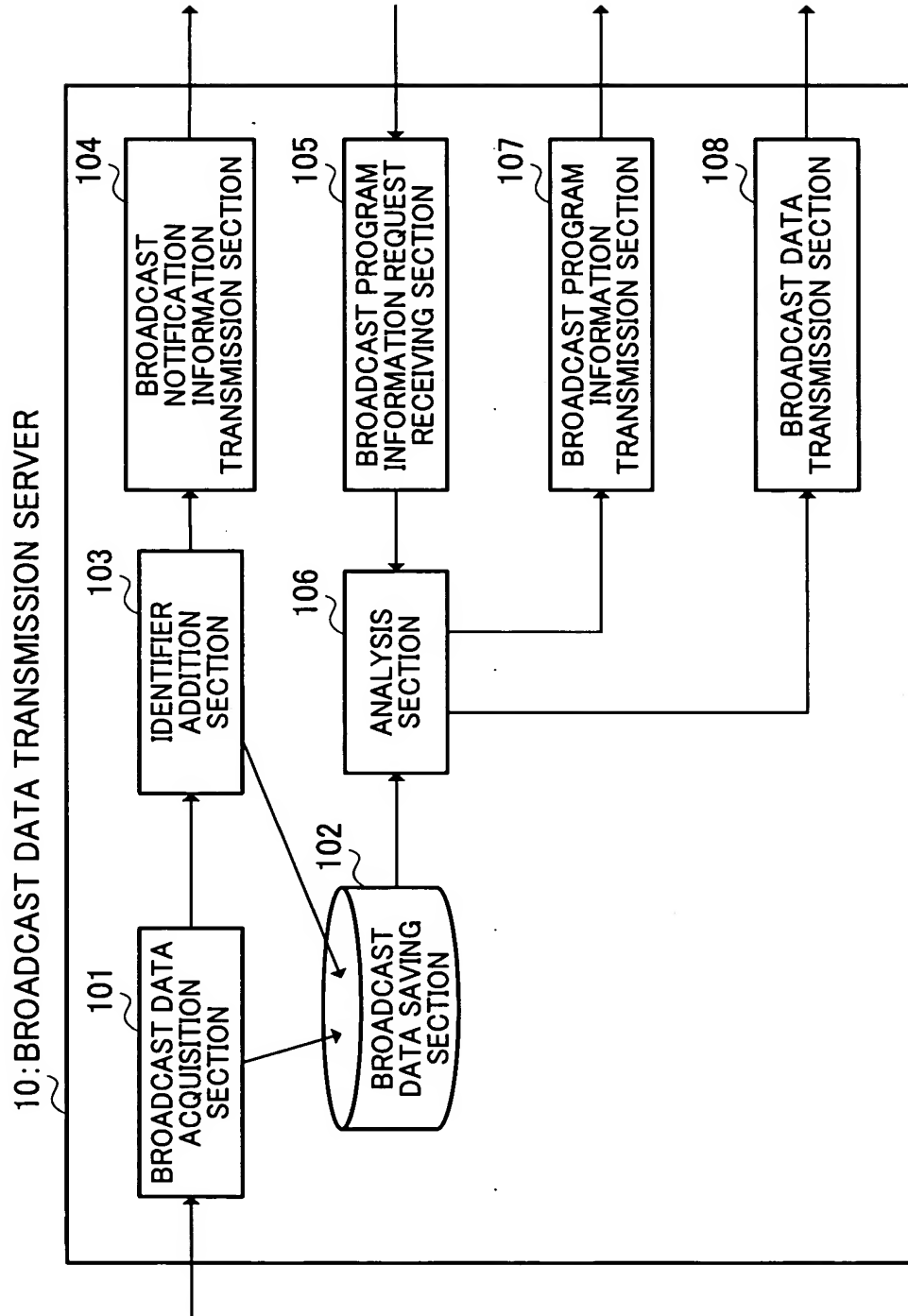


FIG.8

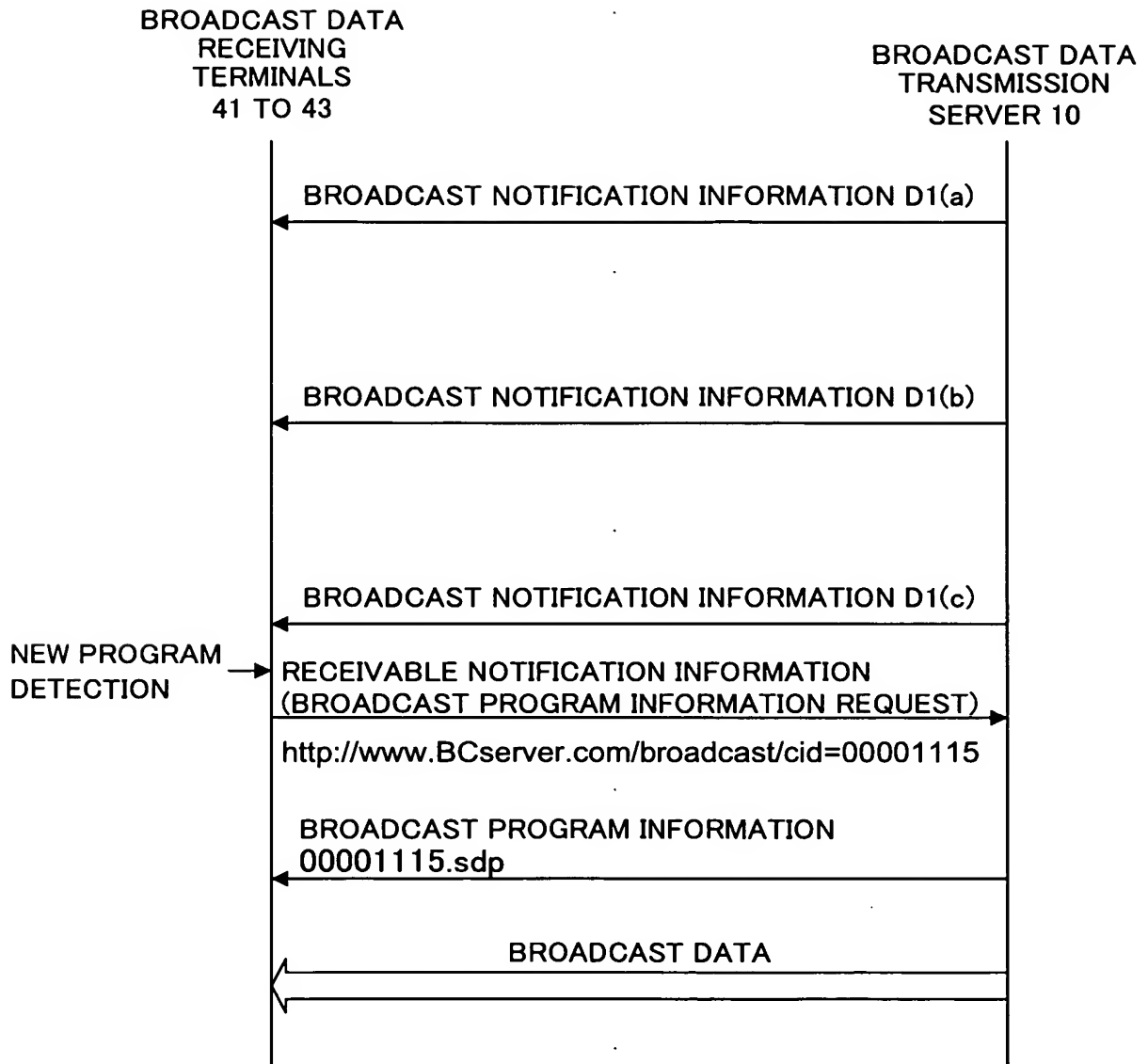


FIG.9

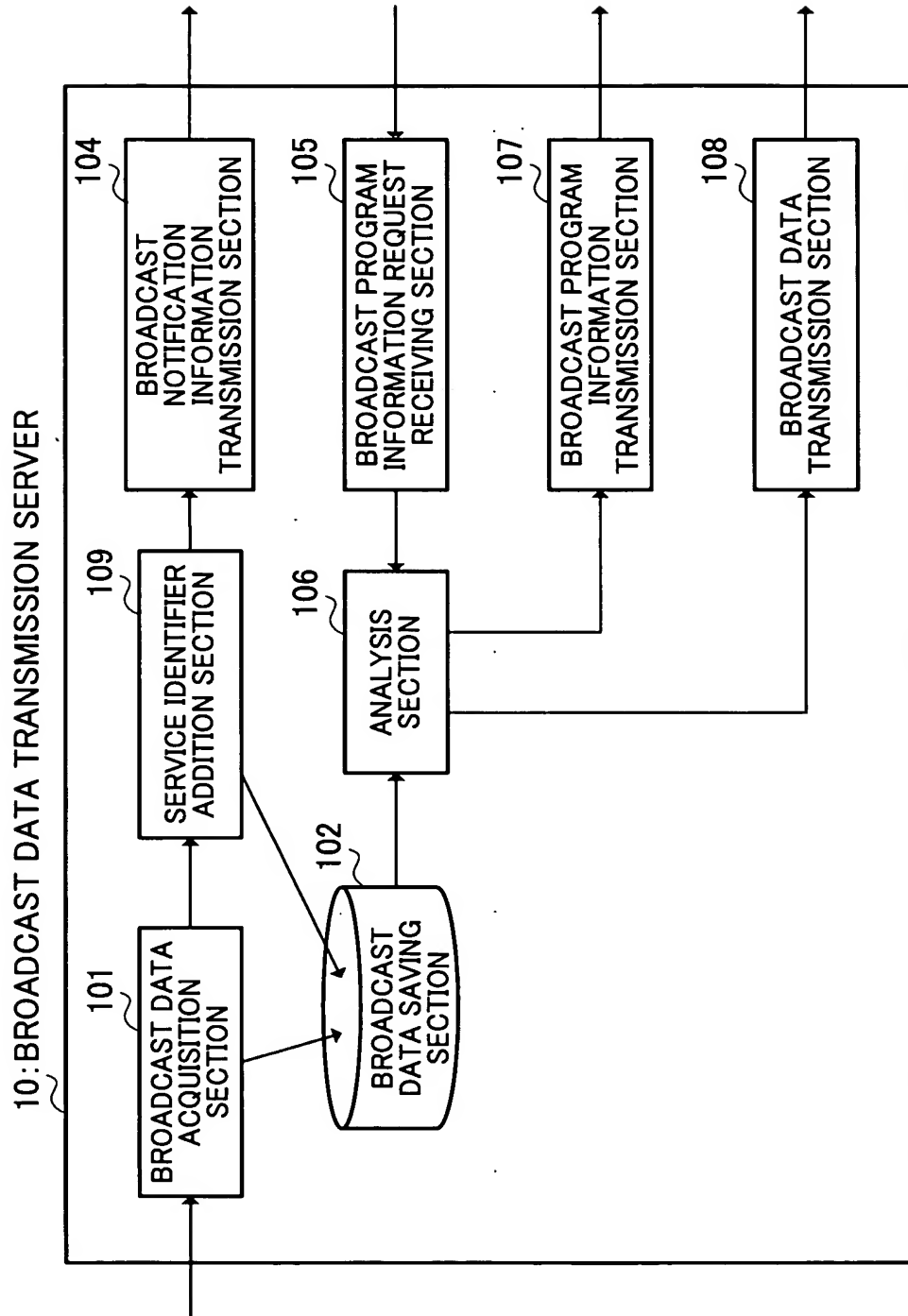


FIG.10

BROADCAST NOTIFICATION
INFORMATION D1(d)

d4

D3

```
<service genre="BCsport" sid="jdlafdkala" info="[SPORTS LIVE]" >
<a href="http://www.BCserver.com/broadcast/cid=00001101">BASEBALL</a>
<a href="http://www.BCserver.com/broadcast/cid=00001114">SOCCER</a>
<a href="http://www.BCserver.com/broadcast/cid=00001132">TENNIS</a>
<a href="http://www.BCserver.com/broadcast/cid=00001234">SKATING</a>
</service>
```

BROADCAST NOTIFICATION
INFORMATION D1(e)

```
<service genre="BCsport" sid="jdlafdkala" info="[SPORTS LIVE]" >
<a href="http://www.BCserver.com/broadcast/cid=00001101">BASEBALL</a>
<a href="http://www.BCserver.com/broadcast/cid=00001114">SOCCER</a>
<a href="http://www.BCserver.com/broadcast/cid=00001132">TENNIS</a>
<a href="http://www.BCserver.com/broadcast/cid=00001234">SKATING</a>
</service>
```

BROADCAST NOTIFICATION
INFORMATION D1(f)

```
<service genre="BCsport" sid="lsifjdfdal" info="[SPORTS LIVE]" >
<a href="http://www.BCserver.com/broadcast/cid=00001101">BASEBALL</a>
<a href="http://www.BCserver.com/broadcast/cid=00001115">SOCCER</a>
<a href="http://www.BCserver.com/broadcast/cid=00001132">TENNIS</a>
<a href="http://www.BCserver.com/broadcast/cid=00001234">SKATING</a>
</service>
```

← NEW PROGRAM

FIG.11

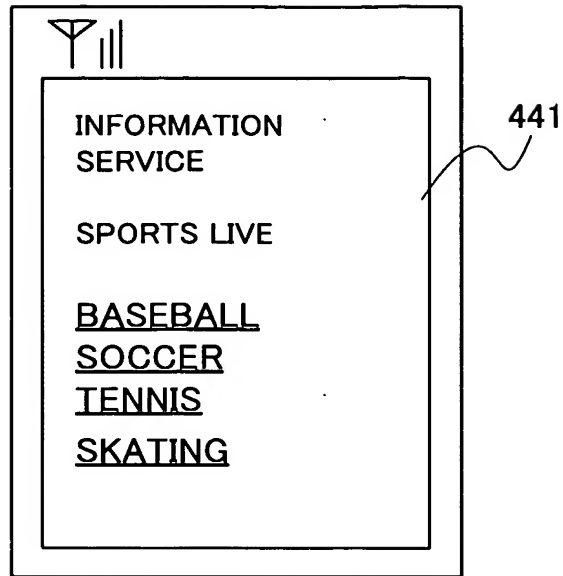


FIG.12

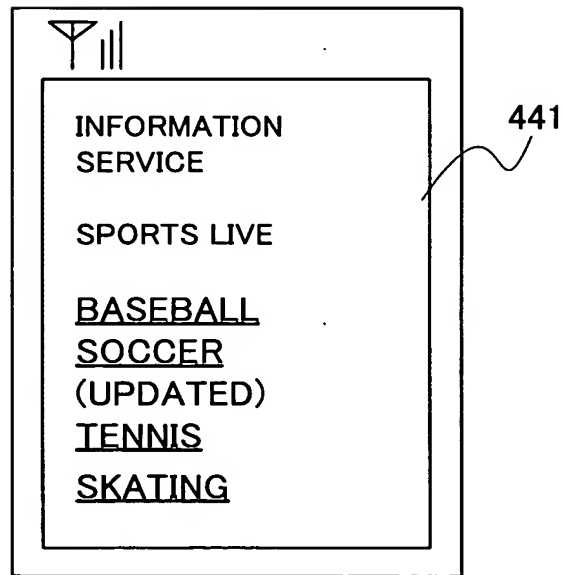


FIG.13

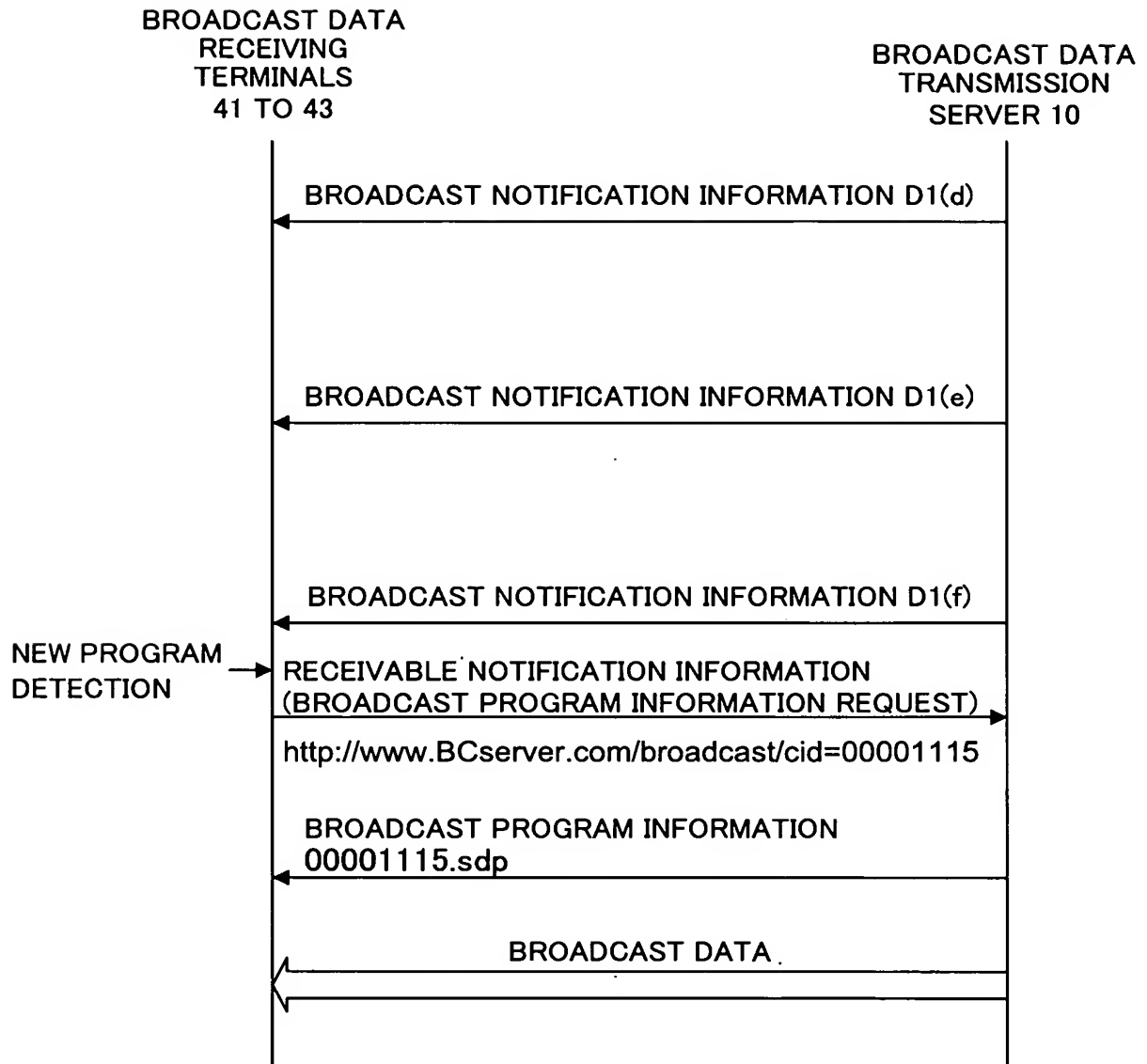


FIG.14

13/17

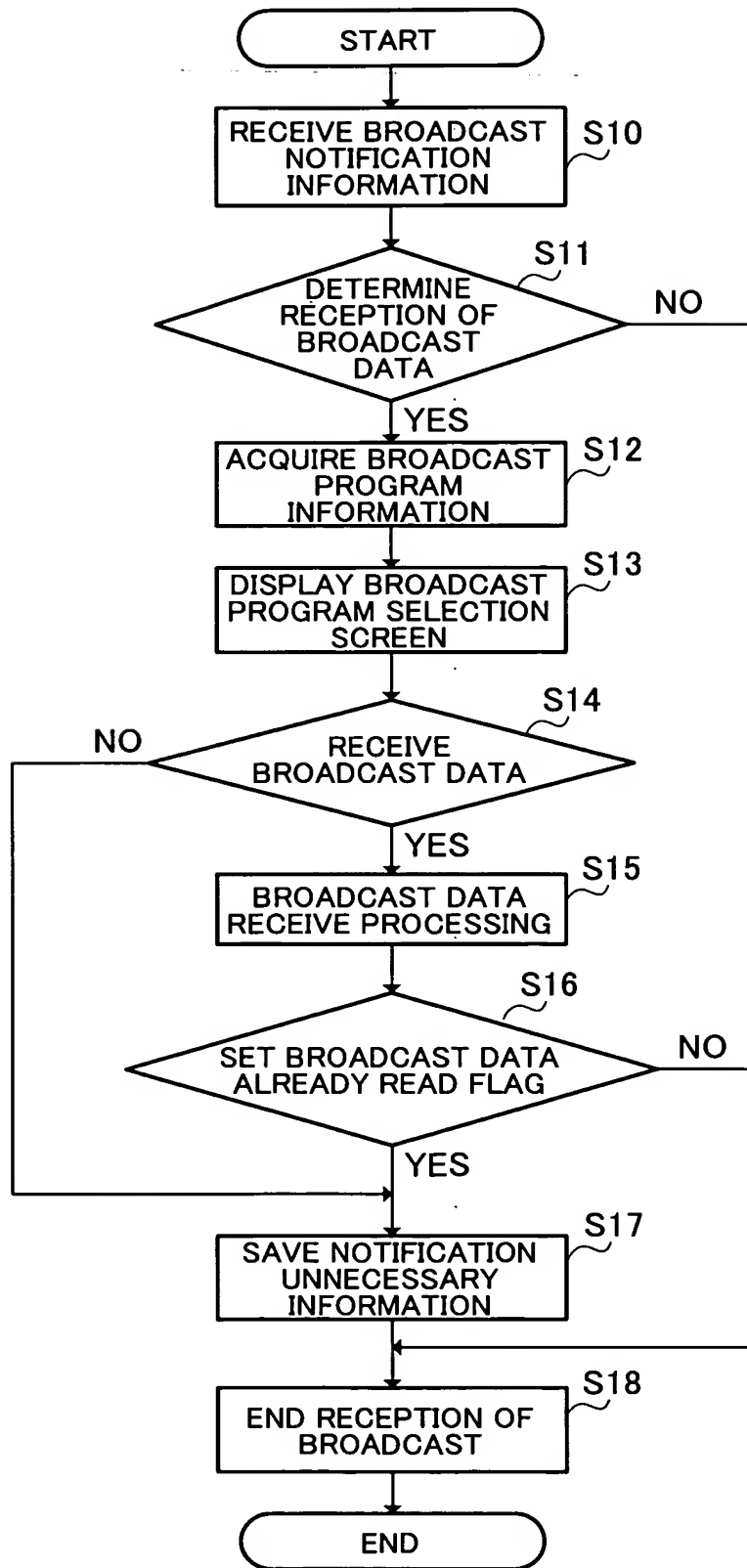


FIG.15

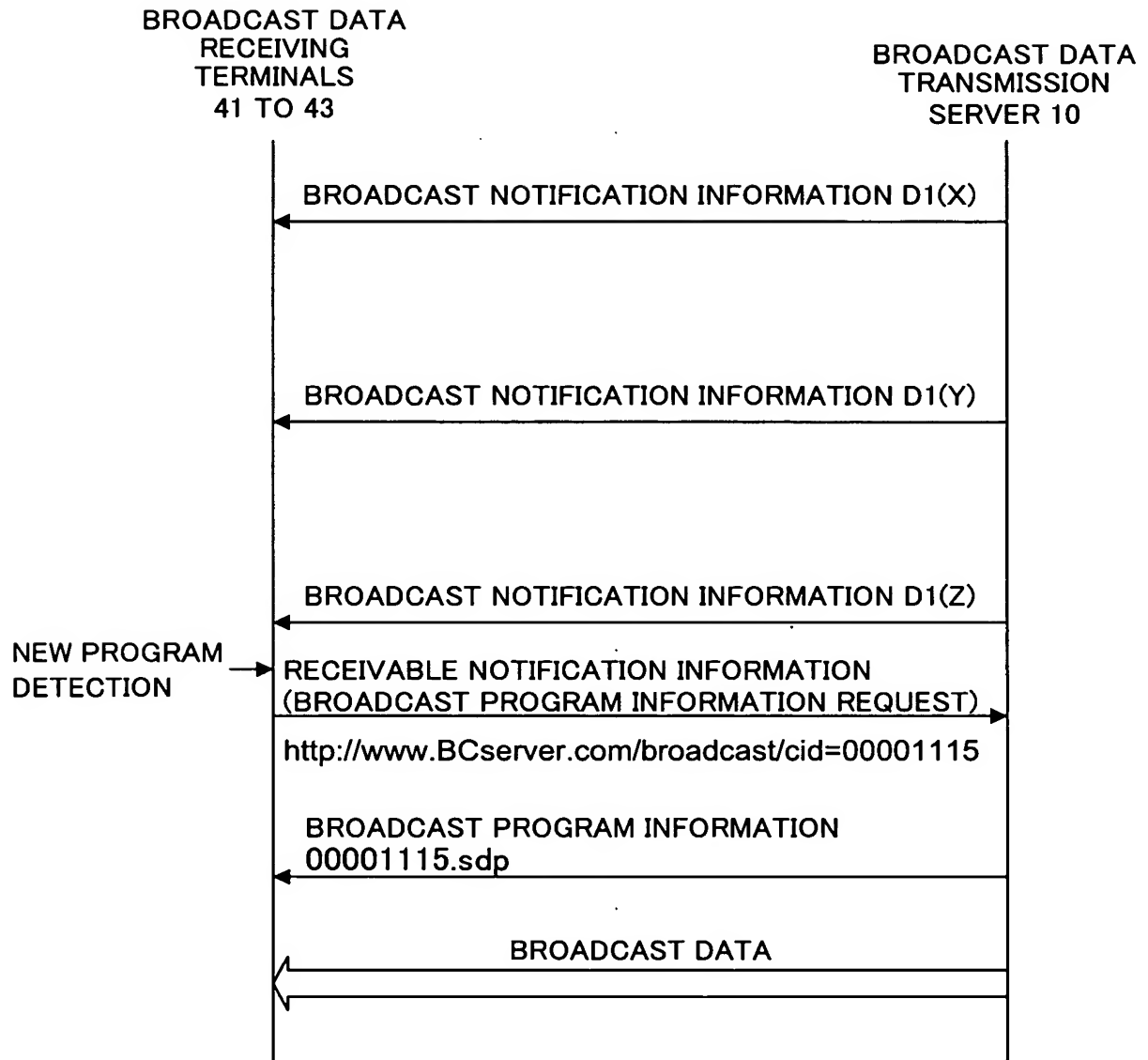


FIG.16

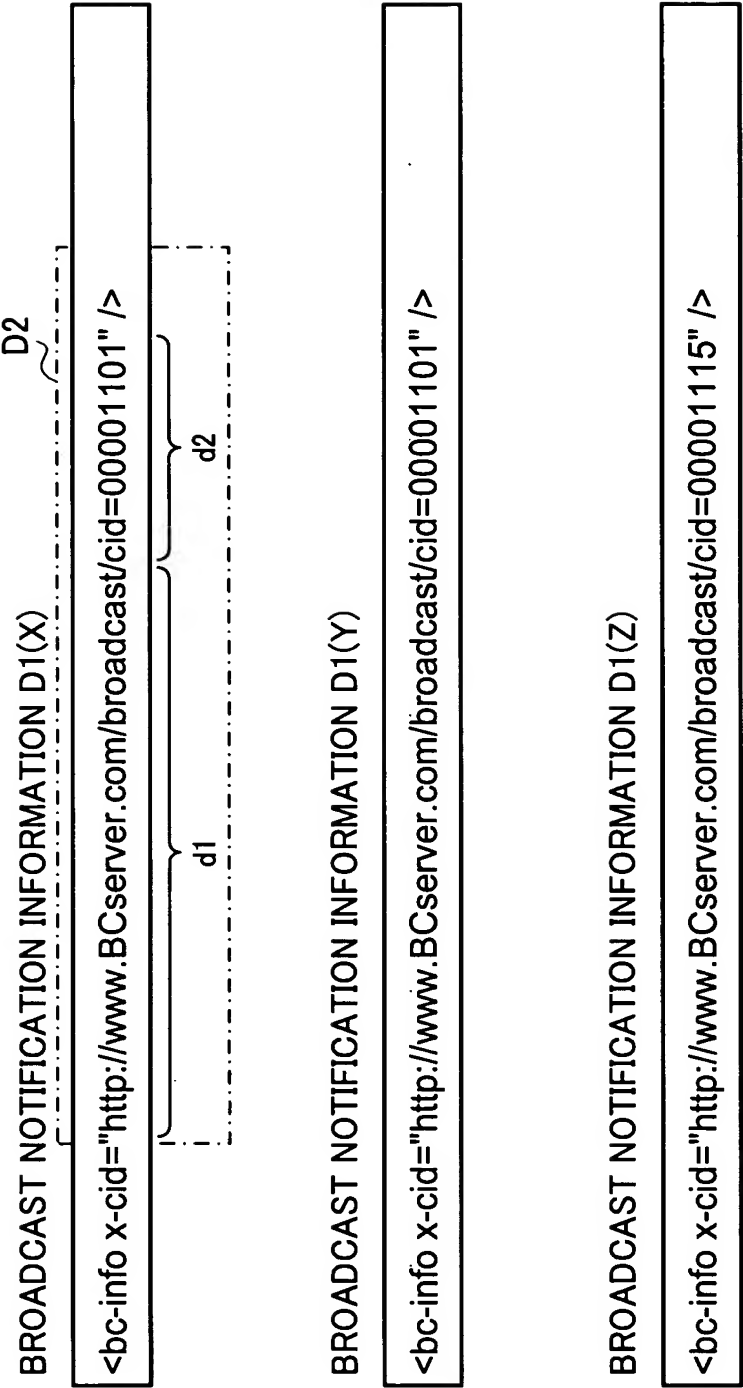


FIG.17

BROADCAST PROGRAM INFORMATION 00001115.sdp

v=0
o=anonymous 2890844526 2890842807 IN IP4 192.168.10.10
s=**SOCCEER**
i=**SPORT ON AIR**
e=anonymous@mail.com
c=IN IP4 0.0.0.0
b=AS:128
t=0 0
m=Video 0 RTP/AVP 96
b=AS:128
a=rtpmap:96 H263-2000/90000
a=fmtp:96 profile=3;level=1
m=audio 0 RTP/AVP 97
a=rtpmap:97 AMR/8000
a=fmtp:97
b=AS:13

FIG.18

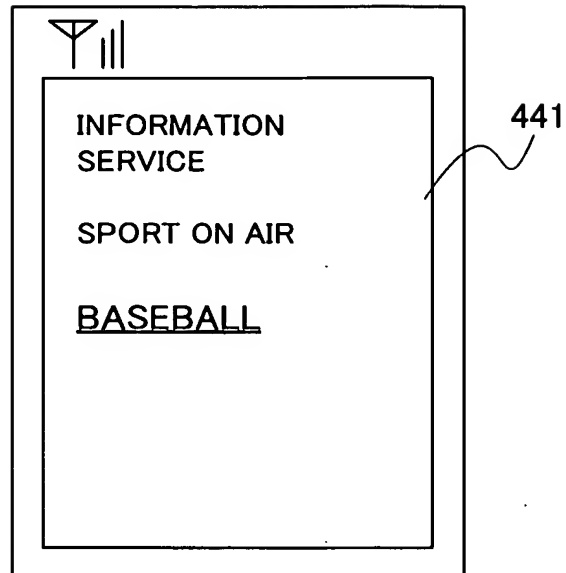


FIG. 19

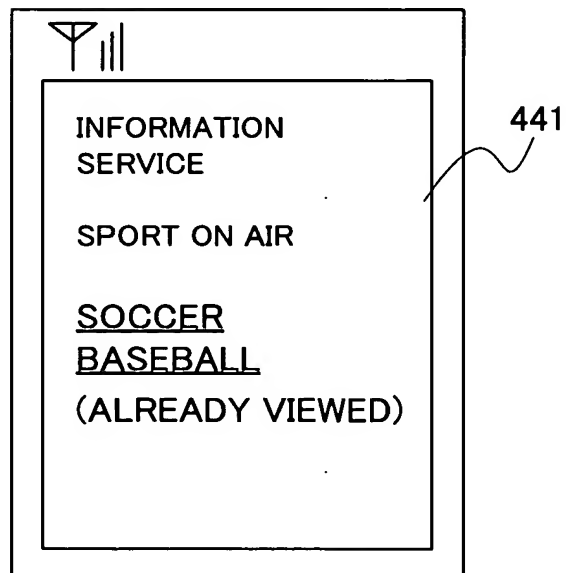


FIG. 20